

The LongPath

A North Alabama DX Club Publication

Special points of interest:

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- May Program Announcement
- Hamfest appeal
- May Birthday

How to Join

- * Come to a club meeting;
- * or send in an application by mail (form on www.NADXC.org)
- * or call Tom Duncan at (256)705-2147

From the President

By Mark Brown, N4BCD

Another month, another series of days without much time to play radio. Trying to stay ahead of the workload as kitted material for a 48' x 36' horse barn is scheduled to arrive next week. I do hear the occasional spot thrown out on our Club repeater and one caught my attention a few nights ago for the incongruity. On May 1, Tom W4NBS put out a CW spot for A25 (Botswana) on **10m - at 0145z**. He assured us on our weekly Tuesday night net that the spot was not a month-old April Fool's joke. Indeed other club members made 10m RTTY contacts with A25 at similar times.

A few interesting news posts on the ARRL website caught my eye recently. In one, the FCC is proposing to amend the Part 95 rules - those affecting FRS, GMRS, and Citizens Band radio services. Notably, the FCC will eliminate the 155 mile limit on 11m contacts while maintaining the 5w power maximum. Jokingly I wonder which NADXC member will be the first to boast attaining 11m DXCC. Personally I find the idea of QSL cards from operators referring to themselves as Foghorn Leghorn or Tweety Bird both amusing and silly.

The second ARRL news item of note is a reminder that the new 630 and 2200m bands are not yet open for business. When notice of the new bands was published a while back, it included the statement that notification of operation on those bands had to be coordinated with the United Telecomms Council which would entail delay the formal publication in the Federal Register. Your author is assuming the reason for this ARRL news item is that some hams may have jumped the gun and begun operations. Or perhaps they're reacting to complaints from homeowner's associations as hams begin construction of their 3600 foot half

-wave antennas stretching across entire communities.

The 2017 Dayton Hamvention is only a few weeks away from its inaugural opening at the Green County Fairgrounds in Xenia, OH. The excitement builds as regular attendees to past Hamventions at Hara Arena wonder how the new venue and logistics stack up against the old. One thing for certain - it will be different.

Field Day is 7 short weeks away. Historically our Club assists the Huntsville K4BFT effort and this year is no exception with members already signed up with trailers, stations, and operators to fill time slots. One serious shortage still remaining is the need for a Station Manager for 40/15m Phone. Bill KD8IGK transitioned that task to me when he moved away and I've enjoyed the task for two years however, this year I'll be assisting the Lincoln County hams in their FD efforts in Fayetteville. Might even try my hand at the CW station.

73,
Mark N4BCD
North Alabama DX Club - President

NADXC Officers and Directors

President	Mark Brown, N4BCD
Vice President	John Stensby, N5DF
Secretary/	Kelley Vann-Johns, W4VPZ
Treasurer	
At-large	Kevin Hibbs, KG4TEI
Directors	Tom Duncan, KG4CUY

April Meeting Minutes and Treasurer's Report

By Kelley Johns, W4VPZ-NADXC Secretary/Treasurer

Members attending 22

Guests 1

Announcements

Jim N4KH announced that Hamfest flea market tables are selling quickly. If you need to reserve one or more, do so soon.

Stephen KK4TJP will coordinate any bundled outgoing QSL cards for club members to help defray some of the increased cost charged by the ARRL for this service. A schedule for collection and shipping of QSL cards will be established as interest of the club members is gauged.

The North Alabama DX Net is continuing on Tuesday evenings that we are not in our monthly meeting. Participation has been very low.

N4BCD announced that Club Log is now a Logbook of the World Trusted Partner.

The ARRL has released two publications of note this week:

- [The 2016 DXCC Yearbook](#), which can be downloaded in PDF format.
- [Grounding and Bonding for the Radio Amateur](#) by Ward Silver NOAX (\$23 for ARRL members)

Spratley Island activation planned for December 2017 has been postponed until March 2018. The last activation was in 2013. Operators include Hrane/YT1AD, Dave/WD5COV, Dave/K3LP, Jim/K9JM, Dragan/YT3W, Dusko/ZL3WW, Mike/K6MKF, Alan/K6SRZ, Douglas/N6TQS, Chris/VK3FY, Lee/VK3GK, Fred/PY3XB, and also 3-5 local amateurs from Kota Konbalu (9M6). The team has two vacant positions. Activity will be 160-6 meters using CW, SSB, and the digital modes. The reason

for the delay of activity is because the Layang Layang resort is closed during the period between December 2017 - February 2018.

Membership Applications

None.

Kelley W4VPZ Treasurer's Report

Beginning Balance	\$ 4,178.98
Credits	
Dues pd (Paypal) for 2017	\$ 30.08
Banquet Tickets	\$ 73.50
Ending Balance	\$ 4,282.56

DX Worked (from the sign-in)

Rob KB5EZ 3 ATNOs: 5U5R, 9G5X, TU7C, AND ZP6ARO on RTTY

Jim N4KH "Can't remember, but a good one!"

Bob K4TNC LoTW for Pitcairn & Central African Republic

Tom N4KG J5B - 3 modes S79Z

Craig K4XR J5B 30m

Stephen KK4TJP TU7C 20m, E51WL - North Cook 40m

Old Business

From Ron Doyle N8VAR on Feb 17 2017: "I'm joining Don Dubon N6JRL and Jim Storms AB8YK on the Dave Kalter Memorial Youth DX Adventure to Costa Rica this year." The membership voted not to fund.

Request for funding received Mar 11, 2017: "We are EA3BT (Josep Gibert) & EA3WL (Nuria Font) and are really pleased to show NORTHERN ALABAMA DX CLUB our new project: GUINEA-

BISSAU 2017 DXPEDITION (J7B & J5W) from April 7 to April 15. The membership declined to act on any funding.

New Business

From Mark N4BCD: "After not much consideration, I think we should vote a non-binding resolution to nominate the entire Longpath Staff for a Pulitzer Prize in the category of Explanatory Journalism and Investigative Reporting for its article "The Rise and Fall of the OX3 Voltage Regulator Tube" that appeared in the April 2017 issue of the LongPath newsletter. A printed copy of the article was passed around for those who may have missed reading it earlier.

Program

Bob K8KI presented Elegant Improvements in Ham Radio Design: 1960 to 1990. There is a dramatic difference between the ham station of 1960 and the ham station of 1990.



Close inspection of the wires attached to the insulator tells us this ham is having a go at the now-forgotten off-center-fed tripole.

More importantly, he just realized the antenna end of the transmission line is still in the shack.

DX Contests for May

By Chuck Lewis, N4NM

ARI International DX Contest (CW, SSB, DIG), 160-10M

May 6, 1200Z to May 7, 1159Z

Exchange: RS(T) plus serial or two-letter province

See Page 87, May QST or www.ari.it

CQ-M Intl. DX Contest (CW & SSB), 160-10M

May 13, 1200Z to May 14, 1159Z

Exchange: RS(T) plus Serial #

See page 87, May QST and www.cq-m.ru

Volta WW RTTY DX Contest, 80-10M

May 13, 1200Z to May 14, 1200Z

Exchange: RST, plus S/N, and CQ zone

See page 87, May QST and www.contestvolta.com

His Majesty King of Spain Contest, (CW), 160 - 10M

May 20, 1200Z to May 21, 1200Z

Exchange: RS(T) plus Serial # or EA Province

See page 87, May QST and www.concusos.ure.es/en

Baltic Contest (CW & SSB), 80/75M only

May 20, 2100Z to May 21, 0200Z

Exchange: RS(T) plus Serial #

See page 87, May QST and www.lrsf.it/bcontest/english

UN DX Contest (CW & SSB), 80-10M

May 20, 0600Z to 2100Z

Exchange: RS(T) plus serial or Kazakhstan district code

See page 87, May QST or www.undxc.kz/bez-rubriki

CQ WPX CW Contest (CW), 160-10M

May. 27, 0000Z to May 28, 2359Z

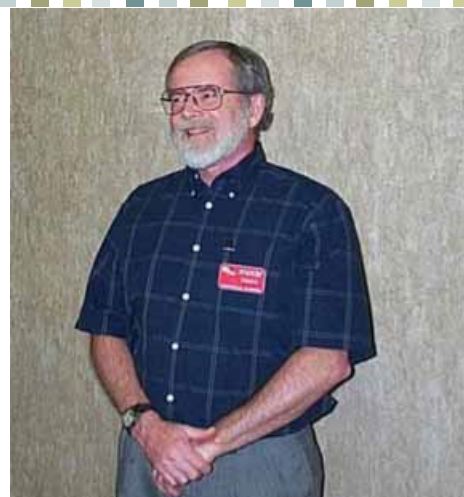
Exchange: RST plus serial #

See page 87, May QST or www.cqwpw.com/rules.htm

OTHERS:

Asia-Pacific Sprint, SSB

1100Z-1300Z, Jun 11



DON'T FORGET:

Alabama QSO Party 1600Z, Jun 3 to 0400Z, Jun 4

www.alabamagsoparty.org/2017/2017Rules.pdf

Dates & times often change or are misprinted in the journals; beware.

Chuck, N4NM

Meager but Eager, a Case Study of DXing with Attic Antennas

May Program by Stephen Smith, KK4TJP

We all know that even the best antenna is in some way a compromise. Cost, performance, space, bands covered, etc. are in constant competition. So what does the new ham do to get on the air when prevailing wisdom seems to say you've been beaten at the antenna game before you even start?

Let's hear from KK4TJP the resounding truth that any antenna is better than none. Get to the Golden Corral around 6:00 pm for dinner, 7:00 for the business meeting, and 7:30 for the program. See you there!



Hamfest Volunteer Appeal

The Huntsville Hamfest needs your help! Each year our Club supplies volunteers to the Hamfest organization to help the event live up to its tagline "The friendliest Hamfest" Our Club's volunteers assist the vendors and flea market visitors with moving their precious cargo in and out of the Arena and numerous other tasks during the event to ensure a smooth-running weekend. If you've signed up lately but haven't gotten a reply from Rick, KE4IOH, sign up again, since we've had a few email problems. Rick will sort it out!

Visit www.hamfest.org and click on the "Volunteers Click Here" link on the left.

Jim N4KH reports that Flea Market tables are going fast and have sold out the past two years. Get one soon if you're planning to sell.

Tom KG4CUI is again organizing the Forum presentations. If you have an interesting topic, please contact Tom directly for scheduling.



The LongPath Staff

Publisher/Editor:

Tom Duncan, KG4CUI

Departments:

Chuck Lewis, N4NM, DX Contests

Kelley Vann-Johns, W4VPZ, Minutes

Mark Brown, N4BCD, From the President

May Birthday—Oliver Heaviside

The credit for making practical sense of James Clerk Maxwell's eponymous set of some twenty equations governing electromagnetics belongs to Oliver Heaviside, born in Camden Town, London on May 18, 1850. Charles Dickens' Bob Cratchit lived in Camden Town in the 1840's, and the legendary late-industrial-revolution/early-Victorian poverty of this part of London was in full vigor during Heaviside's time there.

Heaviside was largely self-taught, in keeping with his inauspicious childhood. Nonetheless his reformulation of Maxwell's equations from their original integral form into a tractable set of four differential equations (which more than a few NADXC members have burnt into their memory) was a boon to making the mathematics useful. Transmission line equations were attacked first as Heaviside worked both on terrestrial and undersea telegraph cables. He based his work on that done by Lord Kelvin beginning in 1855. Although Heaviside worked in anonymity much of his life, he did have contemporary supporters, and Lord Kelvin (William Thomson) was one.

It's hard for a ham to imagine an area of scientific investigation more important than the transmission line, but we HFers must also recognize Heaviside for predicting the refracting E and F layers of the ionosphere. This occurred in 1902 concurrent with but independently of Arthur Kennelly's work and similar prediction. This remained a prediction until 1924 when Edward Appleton proved the Heaviside-Kennelly layers actually did exist for which Appleton was rewarded the Nobel Physics prize in 1947.



Heaviside tended to avoid publicity, and there are few pictures of him.



Heaviside was an avid cyclist.

$$1. \quad \nabla \cdot \mathbf{D} = \rho_v$$

$$2. \quad \nabla \cdot \mathbf{B} = 0$$

$$3. \quad \nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t}$$

$$4. \quad \nabla \times \mathbf{H} = \frac{\partial \mathbf{D}}{\partial t} + \mathbf{J}$$

Heaviside's differential reformulation of Maxwell's equations.